

terms. This is a rather interesting subject that no doubt needs specific research, which is not the purpose of this paper. However it is curious to note how windmills are perceived in other countries, for instance Australia, as a scenic element in the landscape photographed and sold as postcards to tourists.

Hopkins mentions Howard Odum as having coined the term 'energy descent' for the transition from a high fossil fuel use economy to a more frugal one, and also for the term 'a prosperous way down' showing that, "if planned, this could be an opportunity for great inventiveness and abundance" (2005, p.4) .

This is what communities, such as Kinsale in Ireland or Findhorn in Scotland, are doing. The latter is able to supply energy to a community of 200 inhabitants with only 4 wind towers and still sell the surplus production. And what about Loures? There is still a long way to go!

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THE SMART RURAL CONCEPT: BEHIND THE ENERGETIC FUTURE OF TERRITORIES

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Cities of the 21st century are the major theatre representing the current rapid changes of society around the world. The unprecedented demographic, environmental, economic, social and spatial challenges are parts of a choreography that needs to be (re) thought with the aim of evolving models for smart, sustainable and inclusive growth (Europe 2020).

Among the different aspects that together can lead the transition towards a sustainable model, energy plays a central role for supporting adequate levels of development and quality of life. In this framework, the European 20-20-20 targets maybe represent the most paradigmatic initiative to tackle the overall energy issues promoting the reduction in greenhouse gas emissions, the improvement of energy efficiency as well as the raise of share of energy consumption produced from renewable resources.

In addressing these three key objectives, where it is no longer possible to ask "what should we do?", and the only relevant question is "how should we do?", the relationship between urban and rural areas is determinant in order to change the unsustainable path, which is characteristic of contemporary society.

What is a smart city, if there isn't an energy efficient global system to support its current and projected consumption patterns?

Can the "Nearly Zero-Energy Building" (nZEB), where the very low amount of energy required is covered to a very significant extent by energy source produced on-site (Directive 2010/31/EU), be reached, if at present substantial physical, cultural and economic barriers militate against energy efficiency improvement and renewable energy integration in urban context?

Going beyond intelligent and technological responses to energy questions in cities, a broader and more integrated view, which involves urban and rural areas as a whole, has to be promoted. This reciprocal relationship between "energy and urban-rural interactions", is examined in this paper with a view to determine an appropriate model for what may constitute the energetic future of territories.

Rural areas, with their geographical location, land use activities, low density and high production potential in terms of renewable energy, offer the capacity and condition to be turned into green energy exporter areas (Blashke *et al*, 2013). In this way, they represent the potential core component of the territorial platform for implementing renewable energies in order to shift towards energy balance of the whole (Poggi, 2012).

In this context, “energy balance” of a territory can be intended as keeping internal energy flows in a stable state regulating its internal energy production and consumption patterns between urban and rural areas such as the homeostatic process that living things use to actively maintain stable conditions necessary for survival (Canon, 1929). The determination of a theoretical model that would ensure the net zero energy balance at the municipal scale requires the development of both empirical assumptions and practical applications (Poggi, 2012).

With the aim to “bring the energy of countryside into the city, without taking the city into the countryside” (adapted from Telles, 2004), this paper shows how such questions are being addressed and developed within the field of the doctoral thesis entitled “Smart Rural: energy efficiency and renewable energies in rural areas” (Poggi, 2013). The Smart Rural concept recognises that rural areas have to be turned into net zero energy systems by means of an integrated planning process, which is guided by three fundamental strategic objectives:

- The improvement of energy efficiency in rural settlement and farm activities;
- The implementation of renewable energies and smart grids in rural areas;
- The achievement of the net zero energy balance at the municipality scale.

In this framework, the design research and the relationships between the state of the art and the proposed methodological approach will be referred to in order to encourage a debate about the Smart Rural concept and support the active theory-building process promoted by the present research.

ACCESSIBLE LANDSCAPES AND HEALTH: A PROPOSAL FOR A COMPREHENSIVE DEVELOPMENT OF THE RURAL LANDSCAPE AND HERITAGE RESOURCES FOR THERAPEUTIC PURPOSES

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The rural environment has become a complex and multifunctional space as a result of the dynamics in areas that historically were dominated by forestry and agricultural activities and the exploitation of raw materials. Today rural space does not meet exclusively the role of mere support: according to intrinsic characteristics and particularities it becomes an active part of both the environmental and socio-economic systems. Rural environment manifests itself, and is apprehended by the population, through the landscape and cultural heritage.

The rural landscape stands as the sensitive expression of components and processes in a heterogeneous geographical space, built by humans through a long and continuous historical process of transformation from the original physical substrate, which is progressively loaded with cultural values, meanings and symbolism. So, with these ingredients, the countryside can be conceived as a territorial resource to contribute to the development, economic and environmental sustainability, and the well-being and quality of life of its inhabitants.

In numerous forums, it is stated that certain qualities of the landscape and the rural heritage are beneficial to people's health (especially in the last stage of life) and for people who experience either